



IMPAIRED DRIVING COALITION OF CANADA

Strategies to Strengthen Alcohol Interlock Programs in Canada

TRAFFIC INJURY RESEARCH FOUNDATION, JULY 2024

Increases in self-reported impaired driving and fatalities among Canada's 26 million licenced drivers in the past few years, particularly during and post-pandemic, are a cause for concern. According to the Traffic Injury Research Foundation's (TIRF's) [2023 Road Safety Monitor \(RSM\)](#), 5.8% of Canadian drivers admitted driving when they thought they were over the legal limit in the past 12 months. While this percentage may appear small, it should be underscored that this is a percentage of 26 million drivers across Canada (Barrett et al., 2023).

Equally concerning, there were 391 Canadians killed in a road crash involving a drinking driver in 2021; the most recent year that data are available. These fatalities occurred within 12 months of crashes on public roadways across the country (Vanlaar et al., 2022). The percentage of persons killed in a crash on a public roadway in Canada involving a drinking driver was 26.5% (or roughly 1 in 4 road deaths) in 2021. Although this percentage has remained under 30% since 2012, it has increased during the past two years (Barrett et al., 2023).

It is noteworthy that the prevalence of risk-taking on the road among persons not previously taking such risks in 2019 increased in 2020 and 2021 in tandem with the pandemic. These risks included impaired driving, speeding, distraction and fatigue. However, while the latter three behaviours subsequently declined among this population in 2022, impaired driving remained higher until 2023, decreasing from 10.5% in 2022 to 5.8% in 2023 (Barrett et al., 2023). Compared to other risky behaviours, impaired driving declined more slowly and as such, it is imperative that more targeted action is undertaken to address impaired driving.

One very effective and proven strategy to keep communities safe from impaired driving is to ensure all convicted impaired drivers have an alcohol interlock installed on their vehicles. An interlock is a breath-testing device attached to the starter of a vehicle and it is shown to be one of the most effective tools available.

This fact sheet describes the current impaired driving situation in Canada and discusses the effectiveness of the interlock technology. It also summarizes the latest best practices for alcohol interlock programs that should be considered by licensing authorities.



Ignition interlocks are one of the most effective strategies to prevent impaired driving.

Alcohol interlocks are an effective countermeasure that make roads safer for everyone

Research shows the installation of interlocks as part of a robust program prevents these drivers from starting their vehicle when they have been drinking not only while it is installed, but it also reduces recidivism post-removal. Even more compelling is evidence that interlocks reduce alcohol-related crashes. The use of these devices also has other positive benefits including enabling drivers to drive legally, attend treatment, retain employment, and fulfill family responsibilities while still being held accountable for their actions.

A five-year comprehensive evaluation of the alcohol interlock program in Nova Scotia, Canada conducted by TIRF revealed a small but significant permanent decrease in the number of fatal and serious injury alcohol-related crashes following the implementation of the program (Vanlaar et al., 2017).

There are also findings from several US studies showing all-offender interlock legislation is effective in decreasing fatal crashes when compared to states without all-offender legislation. A 2021 study (Teoh et al.) examined the association between interlock laws and fatal impaired-driving crashes between 2001 and 2019 in the U.S. Results revealed all-offender laws were associated with 26% fewer drivers with a .08 blood alcohol concentration (BAC) or higher involved in fatal crashes, compared with no law. Repeat-offender laws were associated with a 9% reduction in impaired drivers and repeat and high-BAC laws were associated with a 20% reduction in impaired drivers in fatal crashes when compared with no law.

Similarly, McGinty et al. (2017) utilized a multilevel modelling approach to examine the effects of state interlock laws on alcohol-involved fatal crashes in the U.S. from 1982 to 2013. All-offender laws were associated with a 7% decrease in fatal crashes (BAC > .08) and an 8% decrease in fatal crashes (BAC > .15). This means an estimated 1,250 fatal crashes would have been prevented in the US if all states adopted an all-offender law. This study also revealed reductions in fatal crashes were evident approximately two years after implementation.

In addition to crash reductions, while interlocks are installed in the vehicle, they reduce recidivism among both first impaired drivers and repeat impaired drivers. This includes the most persistent offenders who repeatedly drive after drinking with an extremely high-BAC and are resistant to changing their behaviour. In fact, more than ten evaluations of interlock programs have reported reductions in recidivism ranging from 50-90% with an average reduction of 64% (Willis et al. 2005; Kanable 2010; Elder et al. 2011; Fielder et al. 2013; McCartt et al. 2013; Voas et al 2013; Beck et al. 2015; Vanlaar et al. 2016; Kaufman and Wiebe 2016).

Limited hard driver licence suspension requirements reduce unlicensed driving

A hard suspension period is the set time during which an offender's driver's licence is suspended until they are eligible to obtain a restricted (interlock) driver's licence. The restricted licence permits them to only drive a motor vehicle equipped with an interlock device. Evidence suggests that the sooner offenders enter the interlock program, the less likely they are to drive while suspended or revoked. Hence, eliminating the hard suspension requirement ensures drivers can legally and safely drive with the device installed on their vehicle, without posing a risk to other road users. The highest-risk offenders are more likely to drive after drinking during the hard suspension period, and the longer they are able to drive without detection or consequences, the more likely they will continue this behaviour and not return to licenced driving. Of concern, drivers who are suspended or revoked are more likely to be crash-involved, and being caught for driving unlicensed may render them ineligible for interlock program participation. This means that having an interlock installed as soon as possible after the offence would help prevent subsequent offences that might otherwise occur during the period of hard suspension (Barrett et al., 2023; Beirness et al. 2003; Chamberlain & Soloman, 2012; Voas et al., 2013; Roberts & Meuleners, 2023). Many (27) states in the U.S. require only persistent offenders to comply with a hard suspension, which can be as limited as 30 days (Barrett et al., 2023). In other words, many states have moved away from a hard suspension period to instead ensure offenders can drive legally and safely with an interlock installed on their vehicle, as opposed to driving while unlicensed during their suspension period and without the interlock.

Mandatory all-offender interlock programs are optimal

Research has shown that monitoring offenders for failing to provide a breath test when required to do so, failing breath tests, tampering and circumvention and imposing graduated responses to these events increases compliance. For example, monitoring offenders has resulted in reducing average BACs and

the number of violations (Vanlaar et al., 2013; Ahlin et al., 2014; Assailly & Cestac, 2014; Voas et al., 2016; Vanlaar et al., 2017). Once interlock users have been compliant for a specific amount of time (e.g., 90 days), or for a specified time at the end of their interlock period, they are eligible to have the device removed. In contrast, a failed breath test or circumvention attempt within the designated time can result in an appropriate program extension of 30-90 days. In this way, program compliance is reinforced among participants and non-compliance is sanctioned.

In Canada, interlock programs that are most inclusive and applicable to the largest number of impaired drivers are typically found in provinces with the highest rates of interlock participation. Enrollment in the interlock program is a condition of relicensing such that impaired drivers are unable to simply wait out the hard licence suspension period. Most of these provinces also reduce the minimum licence suspension period to encourage impaired drivers to install an interlock.

Some jurisdictions have reduced the hard suspension period for interlock participants. Evidence suggests impaired drivers are less likely to participate in an interlock program if it is preceded by a lengthy hard licence suspension period. Most of the provinces with higher participation rates reduced the provincial licence suspensions for some categories of criminally convicted impaired driving offenders who enrolled in their interlock programs (i.e., Nova Scotia and Prince Edward Island).

Early licence reinstatement alone may not be sufficient to motivate impaired drivers to participate in an interlock program. Many impaired drivers choose to avoid the expense and inconvenience of using an interlock device and drive while suspended. All of the provinces with higher interlock participation rates, and most others, have some form of vehicle impoundment program for driving while suspended for impaired driving.

In addition, insurance is generally expensive in Canada, particularly in jurisdictions with private systems, such as Alberta and Ontario. As such, the high cost of insurance for impaired drivers should not be such to disincentivize offenders, leading to them dropping out of the licensing system and driving illegally. In light of the crash reductions shown with the use of alcohol interlocks, there is a case to be made for offering impaired drivers affordable insurance premiums, both to encourage participation and reflect the reduced risks they pose while driving an interlock-equipped vehicle.



Alcohol interlocks are underutilized in many jurisdictions

Interlock programs are largely underutilized across Canada. Although almost all jurisdictions have an interlock program, with few exceptions, even so-called mandatory programs are not truly mandatory, allowing some, or in the case of Ontario, all drivers to opt out of participating. In other words, impaired drivers can avoid interlock installation and still reinstate their driver's licence at the end of the suspension period. As a result, the proven crash and recidivism reduction which make roads safer are not being maximized because some impaired drivers simply do not install an interlock.

For context, in Canadian provinces, the installation rate per 100,000 licensed drivers ranges from 49.2 (Ontario) to 475.9 (Quebec). The interlock program is mandatory for all impaired drivers in Quebec, Saskatchewan, New Brunswick, Newfoundland, and Prince Edward Island. However, in British Columbia, Alberta, Manitoba, and Nova Scotia programs are only mandatory for repeat impaired drivers, and programs are voluntary in Ontario, Northwest Territories, and Yukon Territory. Nunavut does not currently have a program. The highest rates of interlock installation per 100,000 licensed drivers are in jurisdictions with mandatory programs, including Quebec (475.9), Saskatchewan (352.6), and Prince Edward Island (220.5). Conversely, while Ontario is the province with the largest population in Canada, it has one of the lowest rates of installed interlocks per 100,000 licensed drivers at 49.2.¹

When comparing interlock installation rates per impaired driving charge, the rates still show room for improvement across provinces. However, it remains the highest rates of interlock installation per impaired driving charges are in jurisdictions with mandatory programs, including Quebec (339%), Prince Edward Island (118%), and Saskatchewan (94%).² While Ontario has a low rate of installed interlocks per impaired driving charges at 44%, the lowest installation rate is in British Columbia, at 27%.

The bottom line is much more work is needed to improve participation rates for interlock programs across Canada.

Examples of effective alcohol interlock programs

Program effectiveness is linked to higher participation rates. Research shows the most inclusive programs that are applicable to the largest number of impaired drivers are linked to the highest rates of interlock participation (Chamberlain, Solomon, & Murie, 2013). Features of effective programs often include all-offender legislation, strong data management and communication with agencies, a vendor oversight program, compliance-based removal, and making use of advanced technology (i.e., camera, GPS, real-time reporting). Some examples of effective programs and their successes are summarized below.

Colorado. The Colorado interlock program is overseen by the Colorado Department of Revenue (DOR), Department of Motor Vehicles (DMV). Alcohol interlock program eligibility criteria for all impaired drivers are uniformly applied across Colorado and eligibility requirements are defined in State statute. Impaired drivers seeking reinstatement of their driving privileges must install an interlock and comply with all other reinstatement requirements associated with their licence suspension or revocation in order to be eligible. Interlock-restricted licences that are issued are the only Colorado licence on which the word "restricted" appears at the top of the face of the licence. This notation alerts law enforcement that drivers must have an interlock installed on the vehicle they are driving. Colorado has a rate of 990 installed interlocks per 100,000 residents. A comprehensive report about the Colorado program can be found online: turf.us/projects/colorado-ignition-interlock-program-evaluation.

Minnesota. Minnesota's interlock program is administrative and jointly run by the Office of Traffic Safety and Driver and Vehicle Services (DVS) Divisions of the Department of Public Safety. DVS manages enrollment, oversees device use and implements sanctions for participants who violate program requirements. OTS provides financial support, communication, education and outreach. DVS also manages the ignition interlock website, which facilitates enrollment, education and partnerships. Minnesota's interlock program follows several evidence-based practices to increase participation and effectiveness, including: all-offender eligibility, removal of hard suspension periods, compliance-based removal, and treatment, alcohol education or both. Minnesota has a rate of 329 installed interlocks per 100,000 residents. A comprehensive report about the Minnesota program can be found online: turf.us/projects/minnesota-ignition-interlock-evaluation.

Washington. The Washington State Patrol is the regulatory authority of ignition interlock devices, interlock service technicians and interlock service centers throughout Washington State. The ignition interlock program of the Washington State Patrol is operated out of the Forensic Laboratory Service Bureau's Impaired Driving Section and consists of law enforcement officers and support staff dedicated to interlock compliance and public safety. Washington's interlock program follows several evidence-based practices to increase participation and effectiveness, including all-offender eligibility, removal of hard suspension periods, compliance-based removal, and treatment, alcohol education or both. Washington has a rate of 416 installed interlocks per 100,000 residents.

Conclusion

Given the increase in self-reported impaired driving since 2019, greater participation in interlock programs across Canada is imperative to improve road safety. Mandatory interlock requirements are linked to increased program participation and implementing mandatory programs in all Canadian jurisdictions would very likely result in higher participation rates, thereby decreasing impaired driving and impaired driving crashes. As of 2021, provinces with mandatory programs have the highest installation rates, proving that mandatory interlock requirements are effective in increasing participation among impaired drivers.

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¹ Territories are excluded here due to much smaller populations.

² Percentages over 100% may be due to administrative licencing low-BAC sanctions which impose interlock requirements in addition to impaired driving charges.

TRAFFIC INJURY RESEARCH FOUNDATION

The vision of the Traffic Injury Research Foundation (TIRF) is to ensure people using roads make it home safely every day by eliminating road deaths, serious injuries and their social costs. TIRF's mission is to be the knowledge source for safe road users and a world leader in research, program and policy development, evaluation, and knowledge transfer. TIRF is a registered charity and depends on grants, awards, and donations to provide services for the public. Visit tirf.ca.



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TIRF & Diageo North America formed the IDCC to tackle impaired driving in Canada.

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